REMARKS

This Amendment is in response to the final Office Action mailed on October 15, 2009. Claim 1 is amended and is supported, for example, in the specification on page 10, line 35-page 11, line 2. No new matter is added. Claims 1, 3-5 and 30 are pending.

Claim Objections:

Claim 1 is objected to for informalities. In particular, the objection asserts that it is not clear whether Applicants wanted to recite "substrate placed inside" or "substrate placed innermost". Applicants are unsure as to the distinction between the two phrases noted above. Applicants note that the phrase "with the flexible elongated substrate placed inside" is intended to clarity that when a flexible elongated substrate, a negative collector, a negative active material, a solid electrolyte, a positive active material, and a positive collector are wound in this order, the flexible elongated substrate is the innermost layer of the winding of the band-shaped laminate. Withdrawal of this objection is requested.

§112, 2nd Paragraph Rejections:

Claims 1, 3-5 and 30 are rejected as being indefinite. In particular, the rejection asserts that the phrase "in close contact with each other" is unclear. Applicants have amended claim 1 to replace "in close contact with each other" with the phrase "in direct contact with each other" for clarity. Withdrawal of this rejection is requested.

§102 Rejections:

Claims 1, 3 and 4 are rejected as being anticipated by Shizuki (US Publication No. 2003/0134186). This rejection is traversed.

Claim 1 is directed to an energy device comprising a winding body in which a band-shaped laminate having a flexible elongated substrate, a negative collector, a negative active material, a solid electrolyte, a positive active material, and a positive collector in this order is wound in a plate shape with the flexible elongated substrate placed inside. Claim 1 further recites that the negative collector, the negative active

material, the solid electrolyte, the positive active material, and the positive collector are formed on the flexible elongated substrate by a vacuum film-forming apparatus.

Shizuki does not disclose or suggest these features. In particular, nowhere does Shizuki disclose or suggest that the negative collector, the negative active material, the solid electrolyte, the positive active material, and the positive collector are formed on the flexible elongated substrate by a vacuum film-forming apparatus. In contrast, Shizuki discloses that the strip positive electrode 2 and the strip negative electrode 3 are separately prepared using a coating method, and then the strip positive electrode, the strip negative electrode 3 and the separator 4 are laminated around a flat center core using a lamination process (see paragraphs [0049-0051] of Shizuki).

An energy device in which the negative collector, the negative active material, the solid electrolyte, the positive active material, and the positive collector are formed on the flexible elongated substrate by a vacuum film-forming apparatus results in an energy device that is structurally different from an energy device made using a lamination method in that the energy device formed using a vacuum film-forming apparatus potentially causes the inner layer of the band shaped laminate to crack due to having a small radius of curvature and bending stress resulting from the winding of the band-shaped laminate (see page 6, line 12-page 7, line 1 of the present application).

In contrast, the problem of an inner layer of a band-shaped laminate having cracks does not arise in Shizuki as the lamination process used in Shizuki results in gaps between adjacent layers and adjacent layers being displaced from each other. Moreover, Shizuki teaches an electrolyte solution for providing ion conductivity in the battery (see paragraph [0054] of Shizuki), while claim 1 is directed to an energy device that relies on the solid electrolyte for providing ion conductivity. Thus, the negative collector, the negative active material, the solid electrolyte, the positive active material, and the positive collector being formed on the flexible elongated substrate by a vacuum film-forming apparatus results in an energy device that is structurally different from an energy device made using a lamination method, as disclosed in Shizuki.

Accordingly, Shizuki does not disclose or suggest a structure in which the negative collector, the negative active material, the solid electrolyte, the positive active

material, and the positive collector are formed on the flexible elongated substrate by a vacuum film-forming apparatus, as recited in claim 1.

Also, nowhere does Shizuki disclose that a band-shaped laminate having a flexible elongated substrate made of an insulating material, a negative collector, a negative active material, a solid electrolyte, a positive active material, and a positive collector in this order is wound in a plate shape with the flexible elongated substrate placed inside. Particularly, Shizuki does not disclose which of the strip positive electrode 2, the separator 4 or the strip negative electrode 3 is placed inside. Figure 1 of Shizuki merely discloses that the negative collector member 6 is provided at a lower end of the winding body 21, just as the positive collector member 5 is provided at an upper end of the winding body 21 (see Figures 1 and 2 of Shizuki). Thus, even though it may appear that the negative collector 6 is shown in Figure 1 of Shizuki as being on the inside, it is not clear whether a separator 4 is placed in the innermost position.

The rejection asserts that the features of claim 1 do not preclude a separator placed in the innermost position of the band-shaped laminate. Applicants respectfully disagree. Claim 1 explicitly requires that a flexible elongated substrate, a negative collector, a negative active material, a solid electrolyte, a positive active material, and a positive collector in this order are wound in a plate shape with the flexible elongated substrate placed inside. The term "comprising" in claim 1 cannot be interpreted inconsistently with explicit features of the claim, namely that the laminate is wound with the flexible elongated substrate placed inside.

For at least these reasons claim 1 is not disclosed by Shizuki and should be allowed. Claims 3 and 4 depend from claim 1 and should be allowed for at least the same reasons.

§103 Rejections:

Claims 5 and 30 are rejected as being unpatentable over Shizuki. This rejection is traversed. Claims 5 and 30 depend from claim 1 and should be allowed for at least the same reasons discussed above. Applicants do not concede the correctness of this rejection.

Conclusion:

Applicants respectfully assert that the pending claims are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.

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Respectfully submitted,

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